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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,259	07/18/2003	William Frederick Reeves	DC-05564	4696

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EXAMINER

CARDENAS NAVIA, JAIME F

ART UNIT	PAPER NUMBER
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3623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,259	Applicant(s) REEVES ET AL.	
	Examiner Jaime Cardenas-Navia	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DTAILED ACTION

Introduction

1. This **NON-FINAL** office action is in response to communications received on April 17, 2008. Claims 1-3, 5-7, and 9-11 have been amended. Claims 1-12 are pending.

Response to Amendment

2. Applicant's amendments to the drawings are **sufficient to overcome the objections to the drawings** as set forth in the previous office action.

3. Applicant's amendments to the disclosure are **sufficient to overcome the objections to the disclosure** as set forth in the previous office action.

4. Applicant's amendments to the claims are **sufficient to overcome the 35 U.S.C. § 112, second paragraph, rejections** as set forth in the previous office action.

5. Applicant's amendments to the claims are **sufficient to overcome the 35 U.S.C. § 101 rejections** set forth in the previous office action. Applicant's argument regarding modules has been found convincing. However, **new grounds of rejection under 35 U.S.C. § 101** have been set forth.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claims 1-4 are rejected** under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent (See *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978)) and recent Federal Circuit decisions, a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101.

Independent claim 1 is a process that is not tied to another statutory class and is therefore directed to non-statutory subject matter. Examiner notes that for process claims implemented on a computer to be considered statutory, they must make clear which steps are executed on the computer and which steps are executed manually. Additionally, nominal recitations of structure are not considered sufficient to tie the method to another statutory class.

Response to Arguments

8. Applicant's arguments have been fully considered by the Examiner. In particular, Applicant argues regarding independent claims 1, 5, and 9 that Lubash does not teach or suggest (1) generating a material request plan for producing the item using the customer order and the current state of the available inventory and executing the material request plan, (2) where the generation of a material request plan includes scheduling the customer order based upon the desired shipping schedule, and the execution of the material request plan takes into account the desired shipping schedule, and (3) where the scheduling of the customer order and the taking into account the desired shipping schedule enabling shipping the item via a lower cost shipping method as if the order were shipped via an expedited shipping method. Additionally, Applicant argues that (4) dependent claims 2-4, 6-8, and 10-12 are allowable as a result.

Regarding argument (1), Examiner respectfully disagrees. Examiner cites par. 15, lines 15-19, which clearly state, "The present invention also can be used to develop an optimized shipping schedule involving unique input variables such as required payload size, delivery due dates, types of material being shipped as well as the available resources such as availability of multiple trucks and trained operators." The optimized shipping schedule is the material request plan, the delivery due dates and type of materials being shipped implicitly come from the customer order, and the available resources are clearly the available inventory. par. 27 also provides two examples that explicitly use customer orders and the available inventory when generating a material request plan (production and delivery), and par. 22 goes into detail about how the available inventory is checked.

Regarding argument (2), Examiner respectfully disagrees. par. 27, lines 5-10 clearly state, "In operation, customer order 125 for various types of completed units or products, such as final product 86, are received by the computer system. These orders may be placed into a production/scheduling queue in a conventional manner." Lines 29-37 of par. 27 go on to state, "For example, it is expected that the plurality of parts, components, and sub-components making up an entire automobile can be scheduled for inclusion onto a "custom ordered" 0 vehicle in real time, from the time the customer places the order to the actual build of the vehicle. By monitoring available resources and notifying operators in advance of the needed parts, the present system provides notification and delivery of the needed parts in time, even if just a single one is necessary." Thus, the generation and execution of the material request plan is clearly based upon the customer order and desired shipping schedule ("in time" is desired shipping schedule).

Regarding arguments (3) and (4), they have been fully considered by the Examiner but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-12 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Lubash et al. (US 2003/0139952 A1) in view of Smith et al. (US 6,879,962 B1).

Regarding claim 1, Lubash teaches:

A method for scheduling work and delivery of material for items in a factory (par. 15, lines 9-19) comprising:

obtaining a customer order (par. 27, lines 5-8), the customer order including an item ordered by a customer, the item having an associated quantity of a material to produce (par. 27, lines 1-5, par. 15, lines 9-14), the customer order including a desired shipping schedule (par. 15, lines 15-19, par. 27, lines 1-5);

determining a current state of the available inventory of material from a plurality of material sources (par. 15, lines 13-14, 18, par. 22, lines 6-11, par. 27, lines 4-5);

generating a material request plan for producing the item using the customer order and the current state of the available inventory, the generating a material request plan including scheduling the customer order based upon the desired shipping schedule (par. 27, lines 1-5, par. 15, lines 9-19);

executing the material request plan, the executing the material request plan taking into account the desired shipping schedule (par. 29, lines 1-7, par. 15, lines 15-19).

Lubash does not expressly teach the scheduling the customer order and the taking into account the desired shipping schedule enabling shipping the item via a lower cost shipping method as if the order were shipped via an expedited shipping method.

Smith teaches the scheduling the customer order and the taking into account the desired shipping schedule enabling shipping the item via a lower cost shipping method as if the order were shipped via an expedited shipping method (col. 21, lines 3-56, various methods for shipping the item are either manually entered or automatically generated. There are multiple methods for shipping an item within the same time frame with varying costs, fig. 9, and so a lower cost shipping method is enabled).

The inventions of Lubash and Smith pertain to optimizing delivery of goods. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, as Smith does not teach away from or contradict Lubash, but rather, teaches a function that was not addressed. The claimed invention is merely a combination of old and well-known elements, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the advantage of a flexible delivery scheduler that calculates cost and the teaching in Lubash that "other conventional and initial scheduling algorithms may also be used" (par. 27, lines 26-27).

Regarding claim 2, Lubash teaches wherein the desired shipping schedule, the customer order and the current state of the available inventory are used to generate a subsequent work schedule and a material delivery schedule (par. 27, lines 1-10, par. 15, lines 9-19).

Regarding claim 3, Lubash teaches wherein the obtaining the customer order includes using a status for the customer order (par. 27, lines 5-13, 17-20. Priority is a status), the status for each customer order being updated continuously (par. 6, lines 1-5, par. 31, lines 1-12); and the status for each outstanding customer order corresponds to an outstanding status (This is true by definition, no patentable weight).

Lubash does not expressly teach that the status is updated continuously no less than every ten minutes.

Official notice is given that updating continuously for any set increment of time, such as no less than every ten minutes, is old and well-known.

All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The claimed invention is merely a combination of old and well-known elements, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to combine the teachings, motivated by the advantage of updating information at appropriate intervals of time.

Regarding claim 4, Lubash does not specifically teach that the item is an information handling system. However, Lubash teaches that their invention “can be used in any system or process in which a plurality of unique input variables and available resources are used and monitored by a demand schedule to optimize the output of the system (par. 15, lines 5-8),” which includes information handling systems (such as computers). Lubash teaches the example of a production facility for producing assemblies made from many combinations of parts and sub-parts (par. 15, lines 1-4), and further teaches the broadness of scope that the invention covers

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(par. 17, lines 1-20). Thus, it would have been obvious to one skilled in the art at the time of the invention that the item could be an information handling system, motivated by the teaching of Lubash that the invention covers a diverse range of manufacturing and production processes and systems.

Regarding claims 5-8 and 9-12, they are rejected using the same art and rationale used above for rejecting claims 1-4. This is because claims 5-8 and 9-12 claim a system and program product for performing the method of claims 1-4.

Terminal Disclaimer

11. The terminal disclaimer filed on July 30, 2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the full statutory term of any patent granted on copending Application No. 10/320,889 (US 2004/0117230 A1), filed on December 16, 2002, has been reviewed and is **pending acceptance**. The terminal disclaimer has been recorded.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Martin et al. (US 5,809,479) teaches receiving, storing, and using all shipping info provided by the customer order, including desired shipping date and range.

Brockwell et al. (US 5,063,506) teaches inputting various modes or shipping, and having them change to satisfy ship dates.

Yoshizawa et al. (US 5,442,561) teaches altering priority of deliveries to alter delivery date to meet customer orders.

Sone (US 7,222,081 B1) teaches continuously updating and monitoring delivery schedules.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime Cardenas-Navia whose telephone number is (571)270-1525. The examiner can normally be reached on Mon-Thur, 9:30AM - 8:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 28, 2008

/J. C./
Examiner, Art Unit 3623

/Beth V. Boswell/
Supervisory Patent Examiner, Art Unit 3623